Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Amalias | And the state of t | | | | | | | |
|--|--|---------------|----------------------|--|-----------------------------|--|--|--|
| Applicant's or agent's file reference SCR-PCT-48 | | | rerence | FOR FURTHER A | ACTION | See Form PCT/IPEA/416 | | |
| International application No. | | |), | International filing da | ate (day/month/year) | Priority date (day/month/year) | | |
| PCT/FR2004/001198 | | | 01198 | 14.05.200 | 4 | 16.05.2003 | | |
| Internat | ional Pat | ent Classif | cation (IPC) or nat | ional classification and | IPC | <u> </u> | | |
| International Patent Classification (IPC) or national classification and IPC | | | | | | | | |
| Applicant SCHERRER, Jean-Marc | | | | | | | | |
| 1. | This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. | | | | | | | |
| 2. | 2. This REPORT consists of a total of 6 sheets, including this cover sheet. | | | | | | | |
| 3. | This re | eport is also | accompanied by A | NNEXES, comprising: | | | | |
| | а | sent i | o the applicant and | i to the International Bi | ureau) a total of | sheets, as follows: | | |
| | sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). | | | | | | | |
| | sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental | | | | | | | |
| | Box. b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) | | | | | | | |
| | | | | | | , containing a sequence listing and/or tables | | |
| | | | | r readable form only, a strative Instructions). | as indicated in the Supple | mental Box Relating to Sequence Listing (see | | |
| 4. | | eport contai | ns indications relat | ing to the following iter | ns: | | | |
| | \boxtimes | Box No. 1 | Basis of th | e report | | | | |
| | Ш | Box No. 1 | I Priority | | | | | |
| | | Box No. 1 | II Non-establ | ishment of opinion with | n regard to novelty, invent | ive step and industrial applicability | | |
| | \boxtimes | Box No. 1 | V Lack of un | ity of invention | | | | |
| | \boxtimes | Box No. | | statement under Article nd explanations support | | lty, inventive step or industrial applicability; | | |
| | | Box No. | VI Certain do | cuments cited | | | | |
| | | Box No. | VII Certain de | fects in the international | application | | | |
| | | Box No. | VIII Certain ob | servations on the interna | ational application | | | |
| Date of submission of the demand Date of completion of this report | | | is report | | | | | |
| | | | | | | | | |
| Name and mailing address of the IPEA/EP | | | | · | Authorized officer | | | |
| | | | | | | | | |
| | | | | | | | | |
| Facsimi | le No. | | | | Telephone No. | | | |

International application No.
PCT/FR2004/001198

| Вох | No. I | Basis of the report | | |
|-----|----------------------|--|--|-----------------------------------|
| 1. | | ard to the language, this report is based on the internation under this item. | nal application in the language in which | it was filed, unless otherwise |
| | | s report is based on translations from the original langua ch is the language of a translation furnished for the purp international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4 international preliminary examination (Rule 55.2 and/ | oses of:) or 55.3) | |
| 2. | receiving this repor | international application as originally filed/furnished description: | | lly filed" and are not annexed to |
| | pag | | | as originally filed/furnished |
| | pag | | | - |
| | pag | | received by this Authority on | |
| | | claims: | | |
| | nos | | | as originally filed/furnished |
| | nos | | | any statement) under Article 19 |
| | nos | | · | |
| | nos | | received by this Authority on | • |
| | | drawings: | | |
| | she | | | |
| 1 | | | received by this Authority on | |
| | | ets* | | |
| | ∐ a se | equence listing and/or any related table(s) – see Supplem | ental Box Relating to Sequence Listing. | |
| 3. | L The | e amendments have resulted in the cancellation of: | | |
| | | the description, pages | - | |
| | | the claims, nos. | | |
| | | the drawings, sheets/figs | | |
| | | the sequence listing (specify): | | |
| | | any table(s) related to sequence listing (specify): | | |
| 4. | | is report has been established as if (some of) the amend by have been considered to go beyond the disclosure as fi | | |
| | <u>_</u> | the description, pages | | |
| | 느 | the claims, nos. | | |
| | | the drawings, sheets/figs | · | |
| | | the sequence listing (specify): | | |
| | | any table(s) related to sequence listing (specify): | | |
| * | If item 4 | applies, some or all of those sheets may be marked "sup | erseded." | |

International application No.
PCT/FR2004/001198

| Box No. IV Lack of unity of invention | |
|--|----------|
| 1. In response to the invitation to restrict or pay additional fees the applicant has: restricted the claims. paid additional fees. paid additional fees under protest. neither restricted the claims nor paid additional fees. | |
| 2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not the applicant to restrict or pay additional fees. | o invite |
| 3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is: complied with. not complied with for the following reasons: The separate inventions are as follows: 1 to 2 a method for producing a winding by machining; 3 to 4 a winding comprising means for attaching an electrical connection lug. The above inventions are not so mutually linked as to form a | |
| single general inventive concept (PCT Rule 13.1), for the following reasons: The two inventions have the following technical features in common: "a winding, in particular for an electric transformer consisting of a cylindrical tubular metal component having a polygonal cross-section, cut to form a helix". These technical features are known from the prior art, see for example US 3 656 378. Claims 1 and 3 do not therefore contain the sam or corresponding special technical features. Said two claims are therefore not so mutually linked as to form a single general inventive concept. | 1 |
| 4. Consequently, this report has been established in respect of the following parts of the international application: all parts. the parts relating to claims Nos. | |

International application No.
PCT/FR2004/001198

| Box | | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | |
|-----|------------------------|---|--|-----|--|
| 1. | Statement | | | | |
| | Novelty (N) | Claims | 1-4 | YES | |
| | | Claims | - Control of the Cont | NO | |
| | Inventive step (IS) | Claims | 1-2 | YES | |
| | | Claims | 3-4 | NO | |
| | Industrial applicabili | ity (IA) Claims | 1-4 | YES | |
| | | Claims | | NO | |
| | | | | | |

- 2. Citations and explanations (Rule 70.7)
 - Reference is made to the following documents:

D1: US-A-3 656 378 (DAVIS ARIEL R) 18 April 1972 (1972-04-18)

D2: EP-A-0 436 434 (SCHERRER FERNAND) 10 July 1991 (1991-07-10)

2. INDEPENDENT CLAIM 1

D1, which is considered to be the prior art closest to the subject matter of claim 1, describes (claim 1; column 2, lines 42 to 69; figures 11 to 12) a method for producing a winding according to the preamble of the present claim 1.

Consequently, the subject matter of claim 1 differs from this known method in that it contains the steps according to the characterising part of the present claim 1.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem that the present invention is intended to solve can be considered to be that of providing a method for producing a winding that is easy to implement and can be performed quickly and repeatedly by numerically controlled machines.

The solution to this problem, as proposed in claim 1 of the

International application No.
PCT/FR2004/001198

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

present application, is considered to involve an inventive step (PCT Article 33(3)) for the following reasons:

The inventive method includes only two successive steps (instead of the four steps proposed in the prior art), and requires only one change in the positioning of the tubular component (instead of the three changes required to perform the method according to the prior art). The duration of the method is thus shortened. The risk of errors in the rigorous positioning of one groove relative to the preceding groove is also reduced.

3. DEPENDENT CLAIM 2

Claim 2 is dependent on claim 1 and thus also complies, as such, with the PCT requirements of novelty and inventive step.

- 4. D1 describes (claims) "a winding, in particular for an electric transformer, consisting of a cylindrical tubular metal component having a polygonal cross-section, cut to form a helix".
- 4.1 INDEPENDENT CLAIM 3 creuser
- 4.1.1 D1, which is considered to be the most relevant prior art, describes a winding from which the subject matter of independent claim 3 differs by its characterising part.
- 4.1.2 The problem that the present invention is intended to solve can be considered to be that of obtaining virtually any voltage on a winding.
- 4.1.3 Taking D2 into account, the solution proposed in claim 3 of the present application is not considered inventive (PCT Article 33(3)) for the following reasons. D2 describes an alternative solution to the stated problem, from which the

International application No.
PCT/FR2004/001198

diations and explanations supporting such statement

proposed solution differs only very slightly, particularly
in that the cross-sections of the grooves are T-shaped,
which does not appear to result in any special and
surprising technical effect relative to D2.

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;

- 4.1.4 Consequently, a person skilled in the art seeking to solve the stated problem would combine the features described in D1 and D2 without exercising inventive skill. The solution proposed in independent claim 3 cannot be considered to involve an inventive step (PCT Article 33(3)).
- 5. DEPENDENT CLAIM 4

Box No. V

Claim 4 contains no features which, when combined with the features of any one of the claims to which it refers, comply with the PCT requirements of novelty and inventive step (PCT Article 33(2) and (3)).

6. INDUSTRIAL APPLICABILITY

The invention describes a method for producing a winding suitable for use in an electric transformer, which is clearly industrially applicable.